

Patent Abstracts of Japan

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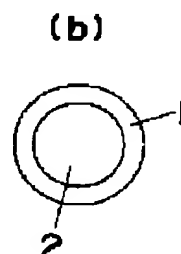
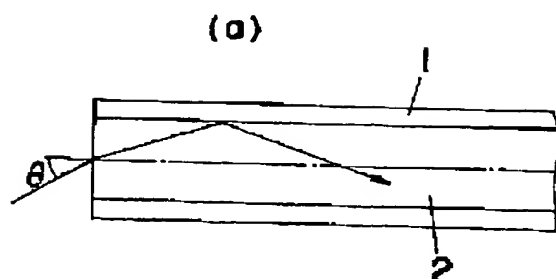
APPLICATION DATE : 17-09-96
APPLICATION NUMBER : 08245222

APPLICANT : MATSUSHITA ELECTRIC WORKS LTD;

INVENTOR : SONODA KENJI;

INT.CL. : C03B 37/016 G02B 6/00

TITLE : PRODUCTION OF OPTICAL FIBER



ABSTRACT : PROBLEM TO BE SOLVED: To provide a method for producing an optical fiber having a large receiving angle of light and capable of transmitting much amount of the light.

SOLUTION: This method for producing an optical fiber comprises a step of performing a hydrating polymerization of an alkoxysilane to form a gel-like compound on the exterior surface of the core material 2, and a step of performing supercritical drying of the gel-like compound to form a silica aerogel comprising a porous skeleton of silica as a clad material 1 on the exterior surface of the core material 2. The optical fiber having an enlarged difference of specific refractive indexes between the clad material 1 and the core material 2 can be produced by using the silica aerogel having a small refractive index.

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